

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
21 July 2005 (21.07.2005)

PCT

(10) International Publication Number
WO 2005/066456 A1

(51) International Patent Classification⁷: **E21B 43/22**,
C09K 7/02

(21) International Application Number:
PCT/CA2005/000009

(22) International Filing Date: 6 January 2005 (06.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2,451,641 9 January 2004 (09.01.2004) CA

(71) Applicant (for all designated States except US): **ALBERTA RESEARCH COUNCIL INC.** [CA/CA]; 250 Karl Clark Road, Edmonton, Alberta T6N 1E4 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HODGINS, Laurie, A.** [CA/CA]; 5135 Barron Drive, NW, Calgary, Alberta T2L 1T7 (CA). **WASSMUTH, Fred** [CA/CA]; 2022 - 7th Avenue, NW, Calgary, Alberta T2N 0Z6 (CA).

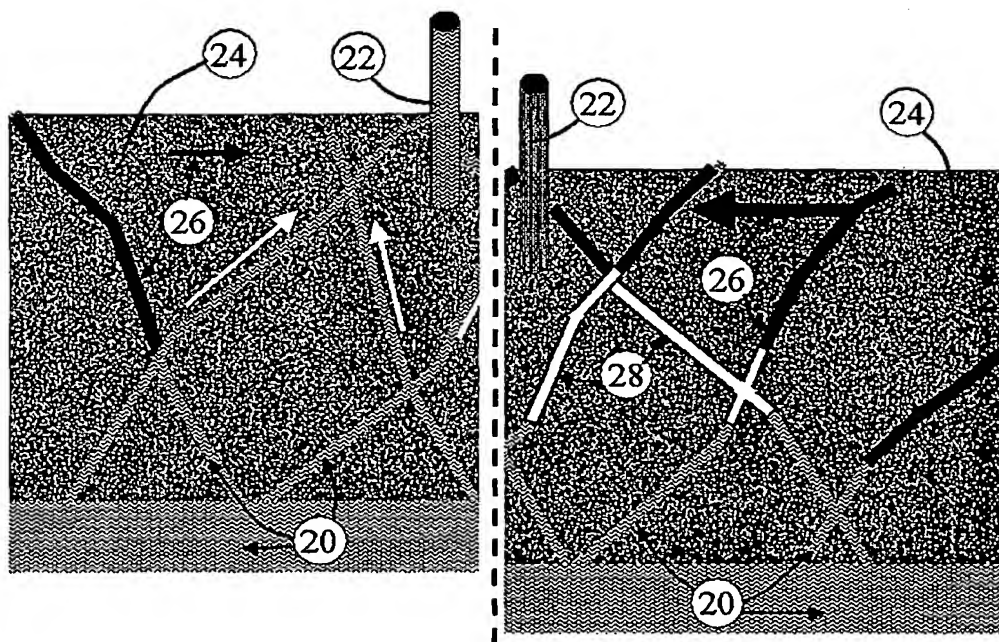
(74) Agents: **GARWASIUK, Helen et al.**; 1501 - 10060 Jasper Avenue, Scotia Place, Tower Two, Edmonton, Alberta T5J 3R8 (CA).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: METHOD OF REDUCING WATER INFLUX INTO GAS WELLS



(57) Abstract: A method of reducing water influx into a wellbore, wherein the wellbore is in fluid communication with a subterranean formation such as a gas producing formation or gas reservoir. The method particularly places a gelant in a desired position down the wellbore and into the formation in order to thereby reduce the influx of water and enhance the resulting gas production. The method includes the steps of first introducing a gelant into the wellbore and second introducing a temporarily stable foam into the wellbore in order to overdisplace the gelant from the wellbore and into the formation.

WO 2005/066456 A1



Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.